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☐ 1: [J Pharmacobiodyn.](#) 1986 Oct;9(10):861-4.

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**Antitumor activity of a beta-1,3-glucan obtained from liquid cultured mycelium of *Grifola frondosa*.**Ohno N, Adachi Y, Suzuki I, Oikawa S, Sato K, Ohsawa M, Yadomae T.

The antitumor activity of a branched beta-1,3-glucan "grifolan LE" purified from liquid cultures of *Grifola frondosa* (Ohno et al. Chem. Pharm. Bull., 34, 1709-1715 (1986)) was examined on an allogeneic murine tumor system. By intraperitoneal (i.p.) administration (100-200 micrograms/mouse/d X 5) at days 1 to 9 from the tumor transplantation, grifolan LE showed marked inhibitory activity on the growth of solid form sarcoma 180 in ICR mice. Significant activity was also observed in intravenous (i.v.) or intratumoral (i.t.) administrations. However, the oral (p.o.) administration of grifolan LE was not effective. I.p. administration of grifolan LE at a dose of 100 micrograms/mouse/d X 5 before the tumor transplantation showed significant inhibition of tumor growth. I.p. administration of grifolan LE at day +11 to +19 was also effective. Grifolan LE was not effective on the ascites form of sarcoma 180. The pretreatment of sarcoma 180 cell with grifolan LE in vitro did not affect tumor growth. The mice cured from the solid form of sarcoma 180 by administration of grifolan LE had the ability to reject the same tumor cell. From these results, it is suggested that the antitumor activity of grifolan LE occurred by modification of biological responses.

PMID: 3820062 [PubMed - indexed for MEDLINE]

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